

# DRAFT

## Appendix G

### FORTRAN COMMON BLOCK LISTINGS

This appendix contains listings of the main common blocks used by the weapon/target selection functional element. The listings are organized alphabetically by file name as follows:

*envdat*  
*extst*  
*fcstat*  
*mind2*  
*mind3*  
*mind4*  
*misdat*  
*ppost*  
*prjct*  
*rdrsta*

***envdat***

```

C-- INCLUDE FILE /envdat/
c*readin: rmnlo rmxlo rmnhi rmxhi crcf crci tgcor aofalt amachv
c*readin: ralt galt gmod enmlid tb ts tfmin tfmax tld cdb cds ctb
c*readin: cts cda cdg cdga cvmn cta cvgi cgl cml cgi cvc csa cr
c*readin: csm cmn
    integer      mxlnch
    parameter (mxlnch = 5)
    integer    len_envdat
    parameter(len_envdat=4*mxlnch+2)

C
    integer envdat_cptr,nlnchm,seltst,mmtst,firtst,plnch
    integer sup_env_ptr
    common/envdat/envdat_cptr, seltst(mxlnch), mmtst(mxlnch),
1 firtst(mxlnch), plnch(mxlnch), nlnchm, sup_env_ptr

C
    real menvlp(len_envdat)
    equivalence(seltst,menvlp)

C
C BEGIN TYPE I LAR SPECIFICATION
    integer    len_sup_env1
    parameter(len_sup_env1=60)
    real rmnlo,rmxlo,rmnhi,rmxhi,crcf,crci,tgcor,aofalt,amachv
    real ralt,galt,gmod
    common/sup_env1/rmnlo(3,2),rmxlo(3,2),rmnhi(3,2),rmxhi(3,2),
1 crcf(3,2),crci(3,2),tgcor(6,3),aofalt,amachv(2),ralt,galt,gmod
    real sup_env1(len_sup_env1)
    equivalence(rmnlo,sup_env1)

C BEGIN TYPE II LAR SPECIFICATION
    integer    len_sup_env2
    parameter(len_sup_env2=65)
    real enmlid,tb,ts,tfmin,tfmax,tld,cdb,cds,ctb
    real cts,cda,cdg,cdga,cvmn,cta,cvgi
    real cgl,cml,cgi,cvc,csa,cr,csm,cmn
    common/sup_env2/enmlid,tb,ts,tfmin,tfmax,tld,cdb(4),cds(4),
1 ctb(2), cts(2),cda(4),cdg,cdga(4,2),cvmn(2,2),cta,cvgi,
2 cgl(2),cml(2),cgi(4),cvc(3),csa,cr(2),csm(2),cmn(12)
    real sup_env2(len_sup_env2)
    equivalence(enmlid,sup_env2)

C BEGIN TYPE III LAR SPECIFICATION
    integer    mx_spds, mx_alts, mx_elv, mx_asp, mx_se
    parameter(mx_spds=3,mx_alts=3,mx_elv=3,mx_asp=5,mx_se=5)
    integer len_r_se0,len_sefac
    parameter (len_r_se0=mx_spds*mx_spds*mx_alts*mx_elv*mx_asp,
1 len_sefac=len_r_se0*mx_se)
    integer    len_sup_env3
    parameter(len_sup_env3=
1 2*len_r_se0+ 2*len_sefac+
3 4*mx_spds + 2*mx_alts + 2*mx_elv + 2*mx_asp + 2*mx_se + 10 +
4 2*mx_elv*mx_alts)
    real r_se0_mn, sefac_mn, sa_l_mn, st_l_mn, ha_l_mn, el_l_mn,
1 asp_l_mn, se_l_mn,
2 r_se0_mx, sefac_mx, sa_l_mx, st_l_mx, ha_l_mx, el_l_mx,

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```
3 asp_l_mx, se_l_mx
  integer sa_n_mn, st_n_mn, ha_n_mn, el_n_mn, asp_n_mn, se_n_mn,
1       sa_n_mx, st_n_mx, ha_n_mx, el_n_mx, asp_n_mx, se_n_mx
  common/sup_env3/r_se0_mn(len_r_se0), sefac_mn(len_sefac),
2   sa_l_mn(mx_spds), sa_n_mn, st_l_mn(mx_spds), st_n_mn,
3   ha_l_mn(mx_alts), ha_n_mn,
4   el_l_mn(mx_elv,mx_alts), el_n_mn(mx_alts),
4   asp_l_mn(mx_asp), asp_n_mn, se_l_mn(mx_se), se_n_mn,
5   r_se0_mx(len_r_se0), sefac_mx(len_sefac),
2   sa_l_mx(mx_spds), sa_n_mx, st_l_mx(mx_spds), st_n_mx,
3   ha_l_mx(mx_alts), ha_n_mx, el_l_mx(mx_elv,mx_alts),
4   el_n_mx(mx_alts),
4   asp_l_mx(mx_asp), asp_n_mx, se_l_mx(mx_se), se_n_mx
  real sup_env3(len_sup_env3)
  equivalence(r_se0_mn,sup_env3)
C-- END INCLUDE FILE /envdat/
```

***extst***

```
C#automatic:$script/c_include extst
C-- INCLUDE FILE /extst/
C      --FOLLOWING NEEDED FOR GRAPHICS INTERPOLATION
      integer extx,extv,exta,extrwe,extwb,extalp,extalv,extnac,
1          extfgg,extfab
      parameter (extx = mac+1,      extv = 4*mac + 1,
1              exta = 7*mac+1,      extrwe= 19*mac+1,
2              extwb = 28*mac+1,    extalp= 31*mac+1,
3              extalv = (39+mxdev+4)*mac+1,
4              extnac = (39+mxdev+5)*mac+1,
5              extfgg = (39+mxdev+numwpn+10)*mac+3,
6              extfab = (39+mxdev+numwpn+11)*mac+3)

C
C ***** *****
C * IF LEXTST IS CHANGED, ALSO CHANGE /HIST_RD_STAT/LEN_EXT *
C *****
C --NOTE: if lextst is increased it may be necessary to increase the
C --parameter lscr in subroutine hmrgrd
C --NOTE: if lexstc is increased it may be necessary to increase the
C --parameter lscc in subroutine hmrgrd
      integer lextst,lexstc
      parameter
1      (lextst = 4+(manten+40*1+4*3+1*mxdev+1*numwpn+2*9)*mac)
      integer unspec,brwlr,dome,auxstn,confed_sim
      parameter (unspec=0, brwlr = 1, dome = 2, auxstn = 3,
1                  confed_sim = 4)
      real svtime,xe,ve,ae,rbe,rwe,wb,alpha,acmass,fuel,
1 speed,radmin,wsq,wmag,fmach,timded,barems,
2 dypres,area,fgg,fab,ddpd,trpd,ecmlvl,
3 freqp,freqq,rratmx,pratmx,alrate,crnrv
      integer istorl,itype,imind,nactot,armnt,killer,exprfm,entity,
1 nsamst,avdptr,fcptr ,mdctrl,updmod,nnofly,gcmndp,damage,
2 ssm_char_p, ssm_trj_p
      logical alive,c2func,cev_off,is_ssm,slot_in_use
C     SAVE /EXTST/
      common /extst/           svtime(mac),        xe(3,mac),       ve(3,mac),
1           ae(3,mac),        rbe(9,mac),       rwe(9,mac),       wb(3,mac),
2           alpha(mac),       acmass(mac),      fuel(mac),        speed(mac),
3           radmin(mac),     wsq(mac),        wmag(mac),       fmach(mac),
4           istorl(mxdev,mac),itype(mac),     imind(mac),      timded(mac),
5           dypres(mac),     alive(mac),      nactot,
6           armnt(numwpn,mac),killer(mac),   entity(mac),     nsamst,
7           avdptr(mac),     fcptr(mac),      area(mac),       fgg(mac),
8           fab(mac),        mdctrl(mac),     ddpd(mac),       trpd(mac),
9           updmod(mac),     ecmlvl,        barems(mac),     freqp(mac),
*           freqq(mac),     rratmx(mac),     pratmx(mac),
1           exprfm(manten,mac),      alrate(mac),   crnrv(mac),
2           nnofly,         c2func(mac),    gcmndp(mac),   damage(mac),
3           cev_off(mac),    ssm_char_p(mac), ssm_trj_p(mac),
4           is_ssm(mac),    slot_in_use(mac)
      integer extst(lextst)
      equivalence (extst, svtime)
```

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```
c --start of /extstc/:
  parameter (lexstc = 4*mac)
  character jsidea*4
  common /extstc/ jsidea(mac)
  character extstc*(lexstc)
  equivalence (extstc, jsidea)
C-- END INCLUDE FILE /extst/
```

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***fcstat***

```
C-- INCLUDE FILE /fcstat/
      integer    maxair,    lfcsta, cfcptr
      parameter (maxair=10,lfcsta = 13 + maxair + 3*mxskr)
      real fcsta(lfcsta), timemf
      integer mslpp, minair, lnchfx, lnchst, lnmsid, lnchmd, lnchma,
1     linair,tgtdes,lnchng_tgt,lslot_slct
      logical lnchng,hd_slv_act,skr_caged,skr_acquired,skr_borsited
      common /fcstat/ cfcptr, mslpp, timemf, minair, lnchmd,
2                 lnchma, tgtdes, lnchng_tgt, hd_slv_act,
3                 lnchng, lnchfx, lnchst, lnmsid, linair(maxair),
3                 lslot_slct,skr_caged(mxskr),skr_acquired(mxskr),
4                 skr_borsited(mxskr)
      equivalence (fcsta(1),mslpp)
C-- END INCLUDE FILE /fcstat/
```

***mind2***

```

C-- INCLUDE FILE /mind2/
      INTEGER lmind2
      integer l_tnlvis
      parameter (l_tnlvis = 5 + nvalcp)
      integer gc_max_tp
      parameter (gc_max_tp = 5)
      parameter (lmind2 = 1*7 + 22*mlevel + 2*nvals + 1*gc_max_tp +
1 1*l_tnlvis + mac)
      integer sl_num, sl_low, sl_med, sl_high
      parameter (sl_num = 3)
      parameter (sl_low = 1, sl_med = 2, sl_high = 3)
      integer i_ovroff, i_nmusup, i_nospd
      parameter (i_ovroff=1, i_nmusup=2, i_nospd=3)
      integer follow_gci, gci_drag_tactic
      parameter (follow_gci=1, gci_drag_tactic=2)
      integer gc_mnvr,gc_spd,gc_tac,gc_tgt,gc_vec
      parameter (gc_mnvr=1,gc_spd=2,gc_tac=3,gc_tgt=4,gc_vec=5)
      integer bvr_id_md, visual_id_md, electronic_id_md
      parameter (bvr_id_md=1, electronic_id_md=2, visual_id_md=3)
      logical lmdlev,mgun,diseng,rhaw,hkdrag,loopnf,looph,
1          ichang,mchang,ochang,desdis,ltbmbr,
2          dishib,prdone,llvdis,disbng,conevl,
3          iprdir,iprsiz,llopp,iprst0,rhawon,rollim,
4          igngc4,gcv_nolnch,tnl_vis,noammo_sent
      integer fltp,nfltp,altd1,altd2,altd3,altd4,altd7,
1          oldop,altd1o,id_mode,
2          iacid,ielem,iflite,kchan,mxtgtd,myjob,
3          hdtyp, ldform, diralt(5),dirspc,vfspc,fctptr(3),
4          iprmod,iprtgt,iprbar,iprbrd,tgtlvl,pcaplg,capleg,
5          mygci,misn,ifrend,bflt,ient,fmptr,baralt(5),
6          slevel, mxacmm,gc_msg_typ,tactic_phase,gci_tactic,
7          gtac_msg_pt,mxtgt_ac

C
      real values,value2
      real aggfac,alocfa,aloctm,bstn(3),bvrnch,cactn,climb,defmlt,
1  defscl,dirtim,dirval,dtudes,dxw0(3),escmlt,firdel(3),
2  firlim(numwpn),gcnetk,gcvalt,gcvcrs,gcvrng,gmaxm,gundel,hdpkhi,
3  hdpklo,hdpssm,hdrkmx,hdsprd,hlspd,hlval,hlvec(3),ipraz,iprazw,
4  iprel,iprzwd,msnmlt,offmlt,offscl,oldotm,pbrngd,phdgdf,pr2lim,
5  prngd,rpeak(4),rtpnt(3),sbmbr,sephte,septw,seplae,
6  seplaw,sepmlt,slctr(numwpn),slogee,slospd,smbmbr,spd1vl,speedm,
7  splita,stkpn,swbmbr,talloc,tdseng,t_gun_eval,timrot,tlstce,
8  tmdlev,tmlafr,tmusup,toamsn,tproj,tproj3,trch,trch,
9  ttactc,v1vl(3),valme,valrot,vbmb(3),vftim,vfuel,vmisn,vobsrv,
.  vtime,wtvmsl,xbase(3),ordtim,capgs,gcvbrg,gun_temp,gcvta
      real gcvhdg,gcvspd,taugci,vgaci,bias_faults(mfalts)
      real gcv_spddes,gcv_geesdes,gcv_rocdes,sl_g_leeway,ord_fact
      real tmls_gci, tnlvis, last_near_time,gcv_time
      real tnl_alpha, tnl_beta, tnl_tau, tnl_cntrst, tnl_mult(nvalcp)
      real gcr_corr_thr,gcr_rsigma_thr

C
      common /mind2/ ifrend(5),cactn(20,mlevel),values(nvals),

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```
1 tmdlev(mlevel),lmdlev(mlevel),value2(nvals),tmls_gci(gc_max_tp),
  2 tnlvis(l_tnlvis),gcr_corr_thr,gcr_rsigma_thr,mxtgt_ac(mac)
C EQUIVALENCES FOR /MIND2/
 equivalence
 1(ifrend( 1),iacid), (ifrend( 2),iflite),
 2(ifrend( 3),ielem), (ifrend( 4),myjob),
 3(ifrend( 5),mygci)
C --FLIGHT POSTURE VALUES IN CACTN(*,4):
 equivalence
 1(cactn( 5,4),fltp), (cactn( 6,4),nfltp),
 2(cactn( 7,4),igngc4)
C --INTEGER EQUIVALENCES FOR ALTDESC'S IN CACTN(3,*):
 equivalence
 1(cactn(3,1),altd1), (cactn(3,2),altd2),
 2(cactn(3,3),altd3), (cactn(3,4),altd4),
 3(cactn(3,7),altd7)
C --STATION-KEEPING AND MUTUAL SUPPORT VALUES:
 equivalence
 1(values( 1),dxw0(1)), (values( 4),stkpn),
 2(values( 8),tmusup), (values(20),trch),
 3(values(19),trchw), (values( 9),wtvmsl),
 4(values(99),ldform)
C --MISSION AND CAP VALUES:
 equivalence
 1(values(11),rtpnt(1)), (values(14),speedm),
 2(values(15),vmisn), (values(16),toamsn),
 3(values(28),climb), (values(29),gmaxm),
 4(values(18),msnmlt), (values(68),misn),
 5(value2(53),pcaplg), (value2(54),capleg),
 6(value2(78),capgs)
C --HIGH-LEVEL STEERING VALUES:
 equivalence
 1(values(23),hlvec(1)), (values(26),hlval),
 2(values(27),hlspd), (values(59),loopnf),
 3(values(60),looph), (value2( 2),dirspc),
 4(value2( 3),dirval), (value2( 4),diralt(1)),
 5(value2(11),dirtim), (value2(56),baralt(1))
C --GUN FIRING VALUES
 equivalence
 1(values(31),mgun), (values(35),t_gun_eval),
 2(values(66),gundel), (value2(88),gun_temp)
C --MISSILE FIRING VALUES
 equivalence
 2(values(63),firdel(1)), (values(67),mxtgtd),
 3(value2( 1),pr2lim), (values(82),rpeak(1)),
 4(values(86),id_mode), (value2(41),dtudes),
 5(value2(52),tmlafr)
C --GCI VECTORING VALUES
 equivalence
 1(value2(12),pbrngd), (value2(13),prngd ),
 2(value2(14),phdgdf), (value2(17),gcvalt),
 3(value2(16),gcvcrs), (value2(18),gcvrng),
 4(value2(15),gcnetk), (value2(20),gcvhdg),
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```

6(value2(75),taugci),
7(value2(79),gcvbrg),
8(value2(90),gcv_spddes),
9(value2(92),gcv_rocdes),
.(value2(94),gci_tactic),
1(value2(95),gtac_msg_pt),
2(value2(99),noammo_sent),
                                         (value2(76),valgci),
                                         (value2(89),gc_msg_typ),
                                         (value2(91),gcv_geesdes),
                                         (value2(93),tactic_phase),
                                         (value2(96),gcv_nolnch),
                                         (value2(51),gcv_time),
                                         (value2(100),gcvtal)

C   --MISCELLANEOUS:
      equivalence
1(values(22),tproj),
2(values(34),kchan),
3(values(33),offscl),
4(values( 6),offmlt),
5(values(46),rhaw),
6(values(61),ichang),
7(values(73),mchang),
8(value2(45),ient ),
9(value2( 9),conevid),
.(value2(48),fctptr(1))
                                         (values(32),valme),
                                         (values( 5),vobsrv),
                                         (values(30),defscl),
                                         (values( 7),defmlt),
                                         (values(53),tproj3),
                                         (values(62),ochang),
                                         (values(69),tlstce),
                                         (values(40),rollim),
                                         (value2(10),last_near_time),

C   --ROLL-OVER-THE-TOP VALUES
      equivalence
1(values(37),timrot),
2(value2(34),llopp),
3(value2(39),spd1v1),
4(value2(40),slospd),
5(value2(44),rhawon),
6(value2(97),sl_g_leeway)
                                         (values(38),valrot),
                                         (value2(36),v1v1(1)),
                                         (value2(35),bvrnch),
                                         (value2(43),tgt1v1),
                                         (value2(55),slogee),

C   --DISENGAGEMENT VALUES:
      equivalence
1(values(41),diseng),
2(values(43),xbase(1)),
1(values(98),dishib),
                                         (values(42),tdseng),
                                         (values(72),desdis),
                                         (value2(47),disbng)

C   --VALUES FOR FLIGHT POSTURES:
      equivalence
1(values(47),vfuel),
2(values(21),aggfac)
                                         (values(48),vtime),

C   --VALUES FOR ORDER STRENGTHS AND FOR PREVIOUS ORDERS:
      equivalence
1(values(51),alocfa),
2(values(70),oldop),
3(value2(77),ordtim),
                                         (values(52),aloctm),
                                         (values(71),oldotm),
                                         (value2(98),ord_fact)

C   --EQUIVALENCES FOR FLIGHT TACTICS:
      equivalence
1(values(54),hkdrag),
2(values(56),hdpklo),
3(values(58),hdrkmx),
4(values(75),ttactc),
5(values(77),sepmlt),
6(values(79),sephte),
7(values(81),sephtw),
8(values(88),hdpsmn),
9(values(100),prdone),
                                         (values(55),hdsprd),
                                         (values(57),hdpkhi),
                                         (values(74),talloc),
                                         (values(76),altdlo),
                                         (values(78),seplae),
                                         (values(80),seplaw),
                                         (values(87),hdtyp),
                                         (values(89),splita),
                                         (value2(46),llvdis)

C   --VALUES FOR ESCORT MANEUVERS:
      equivalence

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```
1(values(90),vbmbbr(1)),          (values(10),sbmbr),
2(values(17),ltbmbr),            (values(49),smbmbr),
3(values(50),swbmbr),           (values(93),bflt),
4(values(94),bstn(1)),          (values(97),escmlt)
C   --VALUES FOR INTERACTIVE PILOT RADAR DECISION
    equivalence
    1(value2(21),iprmod),          (value2(22),iprdir),
    2(value2(23),iprsiz),          (value2(24),iprsto),
    3(value2(25),iprtgt),          (value2(26),ipraz),
    4(value2(27),iprel),           (value2(28),iprazw),
    5(value2(29),iprzwd),          (value2(30),iprbar),
    6(value2(31),iprbrd)
C   --VALUES FOR INTERACTIVE PILOT VECTORED FLIGHT SPECIFICATION
    equivalence
    1(value2(32),vfspc),          (value2(33),vftim)
C   --VALUE FOR POINTER TO /FMEXT/
    equivalence
    1(value2(42),fmptr)
C   --VALUES FOR SELECT-LIMITS AND FIRING LIMITS
C   --WARNING: these numbers are pilots' "suggestions" and ARE IN NAUT.
MILES
    equivalence
    1(value2(61),slctr(1)),        (value2(68),firlim(1))
C   --VALUES FOR LIMITING PILOT AWARENESS AND CAPABILITIES
    equivalence
    1(value2(80),slevel),          (value2(81),mxacmm),
    2(value2(82),bias_faults(1))
C   --EQUIVALENCES FOR TNLVIS
    equivalence
    1 (tnlvis(1), tnl_vis),       (tnlvis(2), tnl_alpha),
    2 (tnlvis(3), tnl_beta),      (tnlvis(4), tnl_tau),
    3 (tnlvis(5), tnl_cntrst),    (tnlvis(6), tnl_mult(1))
C-- END INCLUDE FILE /mind2/
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## *mind3*

```
C-- INCLUDE FILE /mind3/
    integer rel_unknown, rel_leader, rel_my_element,
1 rel_other_element, rel_other_friend, rel_hostile,
2 rel_hostile_engaged
    parameter(rel_unknown=0,           rel_leader=1,
1           rel_my_element=2,         rel_other_element=3,
2           rel_other_friend=4,     rel_hostile=5,
3           rel_hostile_engaged=6)
    real spdnow,obstim,fstsee,xp,fstobs,vp,valeff,
1 obaold,svtimx,radart,seet,rcvmt,ap,vpold,ifftim,
2 rbep,rwep,fmachp,alphap,asmtim,mm_est_val
    integer mmindx,mmindt,nspotd,iacidx,itypx,irel,inform,iaftx,
1 istore,jstore,iacdtt,ifltx,ielmx,ninmm,dumnd1,type_quality,
2 n_mm_est, mm_est_sta
    logical lcnsdr,lreqac
    integer me,lmind3
    parameter (me = 1)
    parameter (lmind3 = 24 + mac*(26 + 4*3 + 1*nexsto + mffdac) +
1 macmnd*macmnd)
    common /mind3/ nspotd, iacidx(mac), itypx(mac), irel(mac),
1 inform(mac), obstim(mac), fstsee(mac), xp(3,mac), vpold(3,mac),
2 fstobs(mac), vp(3,mac), iaftx(mac), istore(nexsto,mac),
3 jstore(mac), valeff(mac), lcnsdr(mac), iacdtt(mac), svtimx(mac),
4 ap(3,mac), dumnd1, spdnow(mac), obaold(macmnd,macmnd),
5 mmindx(mac), mmindt(mac), ifltx(mac), radart(mac), seet(mac),
6 lreqac(mac), rcvmt(mac), ielmx(mac), asmtim(mac),
7 ifftim(mffdac,mac),rbep(3,3), rwep(3,3), fmachp, alphap, ninmm,
8 type_quality(mac),n_mm_est, mm_est_sta(mac), mm_est_val(mac)
C-- END INCLUDE FILE /mind3/
```

## *mind4*

```
C-- INCLUDE FILE /mind4/
C      SAVE /MIND4/
      integer lmind4
      parameter (lmind4 = 15*1+22*macmnd+3*macmnd*macmnd+macflt+macelm+
1 2*mhost+2*mac)
C      PARAMETER (LMIND4 = 1203)
      logical lmajud,lirhas
      real tmajud,valint,valorl,tauord,timord,ueng,valsit,
1 sem2,patk,pkil,vkexp,psrv,psrvf1,valefl,uatk,
2 uevd,combef,fratio,pseen,tseen,rhst,rhstm,
3 pdetfl,tinir
      integer nhutil,lhutil,nbg,nuatk,luatk,nuevd,luevd,
1 listf,listh,nmyfl1,lmyfl1,nmyelm,lmyelm,nmhutl,nmcel,namcel,
2 mcelid,mcelld,acttgt
C
      common /mind4/ tmajud,nhutil,lmajud,valorl(mac),
1 valord(macmnd),tauord(macmnd),timord(macmnd),ueng(macmnd),
2 valsit(macmnd),lhutil(macmnd),sem2(macmnd,macmnd),nbg,nbg,
3 patk(macmnd,macmnd),pkil(macmnd,macmnd),vkexp(macmnd),
4 psrv(macmnd),psrvf1(macmnd),valefl(macmnd),nuatk,uatk(macmnd),
5 luatk(macmnd),nuevd,uevd(macmnd),luevd(macmnd),
6 combef(mac),fratio,listf(macmnd),listh(macmnd),pseen(macmnd),
7 tseen,rhst,rhstm,pdetfl,nmyfl1,lmyfl1(macflt),
8 nmyelm,lmyelm(macelm),nmhutl(macmnd),nmcel,namcel(mhost),
9 mcelid(macmnd),mcelld(mhost),acttgt(macmnd),lirhas(macmnd),
+ tinir(macmnd)
C-- END INCLUDE FILE /mind4/
```

# DRAFT

## *misdat*

```
C-- INCLUDE FILE /misdat/
C*readin: mskmsl kndaro kndfuz kndenv kndmsl
C*readin: mismas tdlly pl skanxs comg_capable
C*readin: skr_tkb_alg skr_seq_alg gui_law_seq gui_in_alg
C*readin: misaln gydrft num_m_acd_m msl_acd_mach(num_m_acd_m)
C*readin: msl_acd(num_m_acd_m) naz nel azpts elpts mrcs(naz,nel)
      integer nazbn,nelbn
      parameter (nazbn = 19, nelbn = 19)
      integer mbin
      parameter (mbin=nazbn*nelbn)
      integer lnmsl
      parameter(lnmsl=31 + nazbn + nelbn + mbin +
1 2*mx_skr + 2*mx_guid + mx_skr*mx_skr_stg + 2*max_acd_mach)

C
      integer misdat_cptr
      integer mskmsl,kndenv,kndaro,knfdz,eptr,aptr
      integer fptr,mtyptr,kndmsl,num_seekers,skr_dat_ptr
      integer num_guid,guid_dat_ptr,skr_type,guid_type
      integer naz,nel,skr_tkb_alg,skr_seq_alg,skr_sequence
      integer gui_law_seq,gui_in_alg, n_skr_seq, knd_irsig, irsig_ptr
      integer num_engine, num_m_acd_m
      logical comg_capable
      real cdmisl,mismas,tdlly,pl,skanxs,azpts,elpts,mrcs
      real gydrft,misaln,msl_acd_mach,msl_acd,disest_tim
      real purge_tim

C
      common/misdat/misdat_cptr, mskmsl, kndaro, knfdz,
1 kndenv, kndmsl, mismas, tdlly, pl,num_engine,
2 skanxs, comg_capable, skr_tkb_alg, skr_seq_alg,
3 skr_sequence(mx_skr,mx_skr_stg), gui_law_seq, gui_in_alg,
4 misaln, gydrft, num_m_acd_m, msl_acd_mach(max_acd_mach),
5 msl_acd(max_acd_mach), naz, nel, azpts(nazbn), elpts(nelbn),
6 mrcs(mbin), aptr, fptr, mtyptr, eptr, num_seekers,
7 skr_dat_ptr(mx_skr), skr_type(mx_skr), num_guid,
8 guid_dat_ptr(mx_guid), guid_type(mx_guid), n_skr_seq,
9 knd_irsig, irsig_ptr, disest_tim, purge_tim
      real fixdat(lnmsl)
      equivalence(fixdat,mskmsl)

C
C
      integer lnmslc
      parameter (lnmslc=12)
      character*12 mistyp
      common/misdtc/mistyp

C-- END INCLUDE FILE /misdat/
```

# DRAFT

## *ppost*

```
C-- INCLUDE FILE /ppost/
C      SAVE /PPOST/
      integer lenpp
      parameter (lenpp = 41+4*3+macelm+3*macmnd)
      integer altpp, ppmptr, ppmiac, ppmjid, ppmknd, ppmmsk
      integer idsupp, lobspp, ltgtpp, lthrpp, mslmd, dmslpp,
1 mdskpp, nobsp, nsuppp, ntgtpp, nthrpp, pp_skrs,
2 ppmjid_prev, ppmknd_prev
      real clmxpp, dxw0pp, gmxmpp, ppmaof, ppwtim,
1 ppmohr, ppmrmn, ppmrmx, ppmse, rtepp, sflypp, ppmapt,
2 spdmpp, stkppp, toapp, valfpp, vecfpp, vmsnpp, tslct,
3 mpenal, ppm_rpeak, ppm_semax
      logical ppmenv, ppmrng, ppmaim, ppmtrk, pp_gun, pp_comg,
2 pp_undes
      common /ppost/ altpp, ntgtpp, ltgtpp(macmnd), nthrpp,
1 lthrpp(macmnd), vmsnpp, rtepp(3), spdmpp, toapp, clmxpp, gmxmpp,
2 stkppp, idsupp(macelm), nsuppp, mdskpp, dxw0pp(3), dmslpp, mslmd,
3 ppmenv, ppmapt(3), ppmptr, ppmrmn, ppmrmx, ppmiac, ppmrng,
4 ppmaim, ppmse, ppmtrk, ppmohr, ppmaof, ppmmsk, ppmknd, nobsp,
5 lobspp(macmnd), vecfpp(3), valfpp, sflypp, ppmjid,
6 ppwtim, tslct, mpenal,
7 pp_gun,
7 pp_comg, pp_undes, pp_skrs, ppm_rpeak, ppm_semax, ppmjid_prev,
8 ppmknd_prev
      integer ppost(lenpp)
      equivalence (ppost(1), altpp)
C-- END INCLUDE FILE /ppost/
```

# DRAFT

## *prjct*

```
C-- INCLUDE FILE /prjct/
C      SAVE /PRJCT/
      real xeut,veut,rweut,xeuan,veuan,rweuan,rngun,rngrun,dxeuan,
1 dveuan,dxwutn,dvwutn,dxwuan,dvwuan,rng,rngr,dxeua,dveua,dxwut,
2 dvwut,dxwua,dvwua,xeua,veua,rweua,spduan,spdua,spdut,dxbua,
3 dvbua,rbeua,dxbut,rbeut,geesun,gees,eraten,erate,
4 hdngun,hdng,alfe,alfeun,dxbuan,rbeuan,abody,weua
      common /prjct/ xeut(3,macmnd),veut(3,macmnd),rweut(9,macmnd),
1 xeuan(3),veuan(3),rweuan(9),rngun(macmnd),rngrun(macmnd),
2 dxeuan(3,macmnd),dveuan(3,macmnd),dxwutn(3,macmnd),
3 dvwutn(3,macmnd),dxwuan(3,macmnd),dvwuan(3,macmnd),rng(macmnd),
4 rngr(macmnd),dxeua(3,macmnd),dveua(3,macmnd),dxwut(3,macmnd),
5 dvwut(3,macmnd),dxwua(3,macmnd),dvwua(3,macmnd),xeua(3),veua(3),
6 rweua(9),spduan,spdua,spdut(macmnd),dxbua(3,macmnd),
7 dvbua(3,macmnd),rbeua(9),dxbut(3,macmnd),dvbut(3,macmnd),
8 rbeut(9,macmnd),geesun,gees,eraten,erate,hdngun,hdng,alfeun,alfe,
9 dxbuan(3,macmnd),rbeuan(9),abody(3),weua(3)
C-- END INCLUDE FILE /prjct/
```

# DRAFT

## **rdrsta**

```
C-- INCLUDE FILE /rdrsta/
      integer mmslsn
      parameter(mmslsn=10)
      integer lrdrs
      parameter (lrdrs = 9*manten + mmslsn + 5*mrdrtk + 26)
      real iniint
      parameter (iniint = 5.0)
C
      integer ptrdrs,ptbk,ptrant,ptrsws,rstant,mslsnc,nmslsn
      integer radsmd,radtgt,tgtloc,hitid,lsthit,mlhit,nhit,levctr,
1 rtask_ptr,acttsk_ptr,new_rtask_ptr,um_rtask_ptr,rtempl_ptr,
2 tskmod_ptr,tevcctr,mevcctr,oevcctr,prdr_cum
      real rsta(lrdrs),frtime,nom_frtimes, mxazb,mnazb,mxelb,mnelb,rscopl
      real tlhit,tlmtts,res_time,res_power,non_mdld_tim,non_mdld_pwr
      logical desloc,elvman,tcrdr,esaini
C
      common/rdrsta/ptrdrs,ptbk,rstant,ptrant(manten),ptrsws(manten),
1 radsmd(manten),elvman(manten),frtime(manten),desloc(manten),
2 tgtloc(manten),radtgt(manten),mslsnc(mmslsn),nmslsn,rscopl,
3 mxazb,mnazb,mxelb,mnelb,tcrdr,nhit,hitid(mrdrtk),
4 lsthit(mrdrtk),mlhit(mrdrtk),tlhit(mrdrtk),tlmtts(mrdrtk),
5 levctr,rtask_ptr,acttsk_ptr,new_rtask_ptr,um_rtask_ptr,
6 rtempl_ptr,tskmod_ptr,esaini,tevcctr,mevcctr,oevcctr,
7 res_time,res_power,prdr_cum,non_mdld_tim,non_mdld_pwr,
8 nom_frtimes(manten)
C
      equivalence(rsta,ptbk)
C-- END INCLUDE FILE /rdrsta/
```